

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: McGRAW-EDISON

Report Number: P192222

Luminaire Tested: **GLEON-AF-04-LED-E1-T2R-7050-1200**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P192222  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24657)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLEON-AF-04-LED-E1-T2R-7050-1200  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 70 CRI, 5000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 27442 lumens  
Efficiency: N/A  
Efficacy: 106.4 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short - Full Cutoff  
BUG Rating: B3 - U0 - G3

Input Watts (W): 258  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT

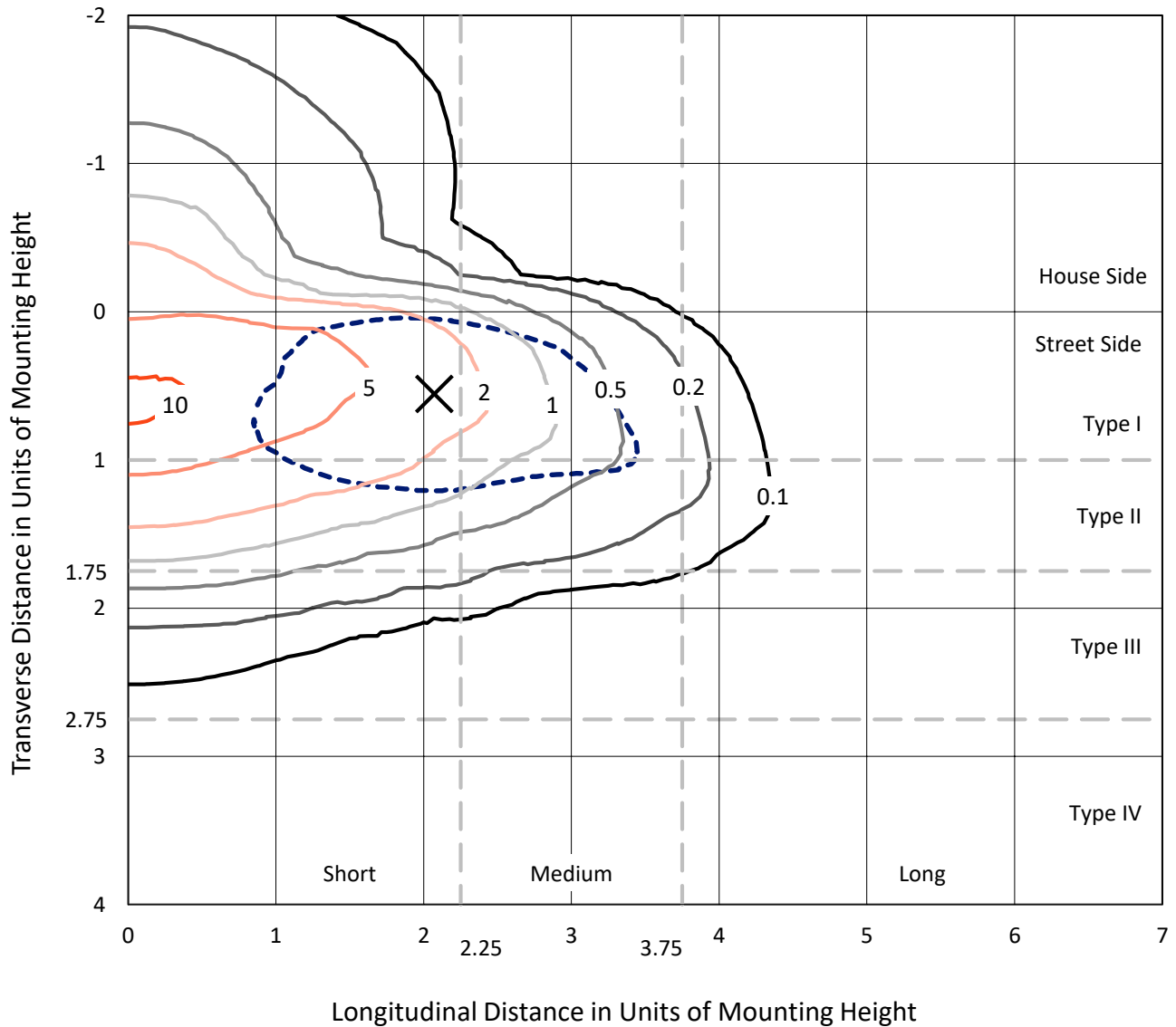


REPORT NUMBER: P192222

CATALOG NUMBER: GLEON-AF-04-LED-E1-T2R-7050-1200

### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

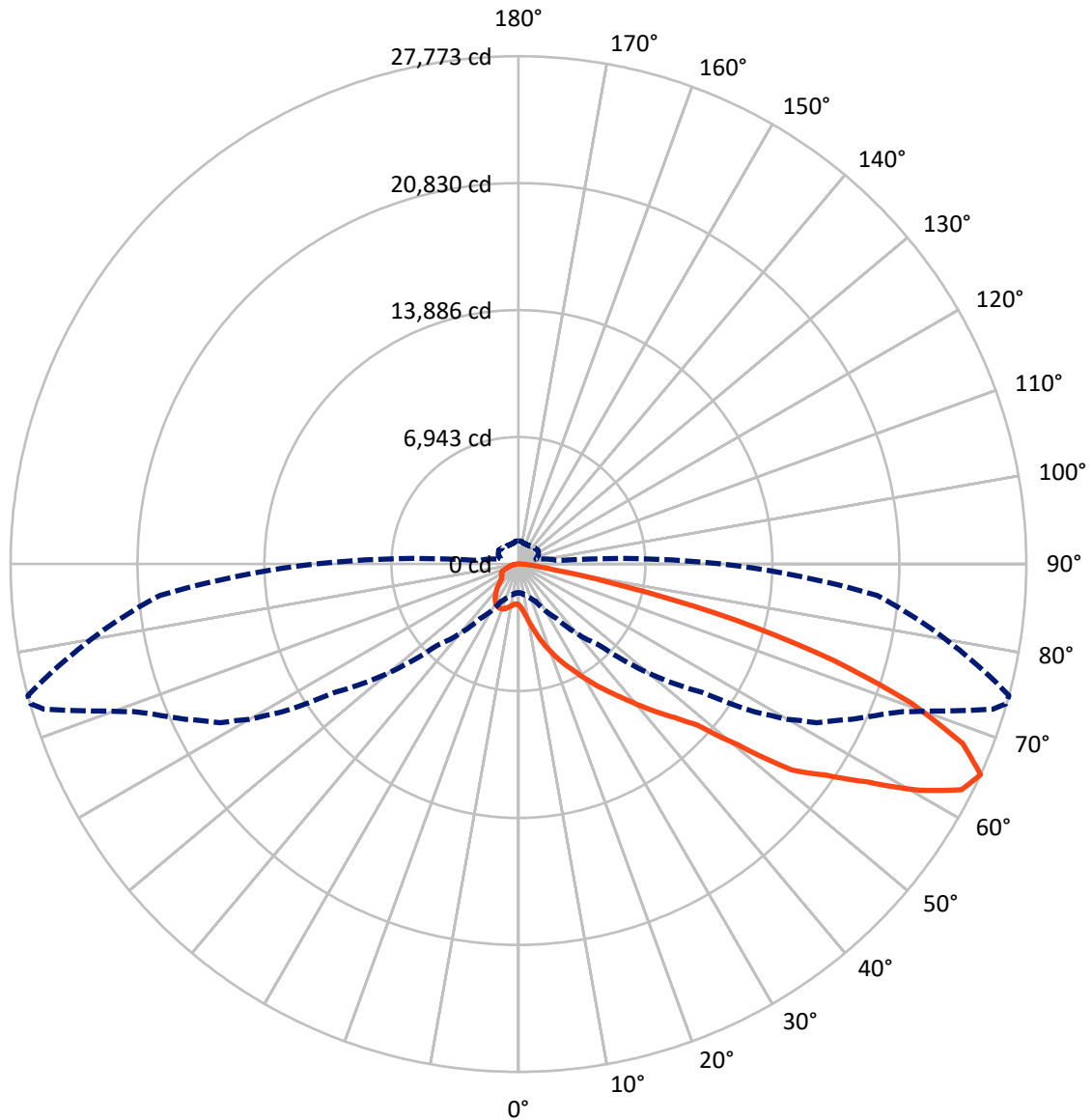


Based on 25 foot mounting height. Maximum calculated value = 11.1 fc  
 Type II - Short - Full Cutoff

REPORT NUMBER: P192222

CATALOG NUMBER: GLEON-AF-04-LED-E1-T2R-7050-1200

### Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical

REPORT NUMBER: P192222

CATALOG NUMBER: GLEON-AF-04-LED-E1-T2R-7050-1200

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4230.9	0.0	4230.9
	% Fixture	15.4	0.0	15.4
<b>Street Side</b>	Lumens	23211.1	0.0	23211.1
	% Fixture	84.6	0.0	84.6
<b>Total</b>	Lumens	27442.0	0.0	27442.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	275.7	1.0
10°-20°	1077.1	3.9
20°-30°	2209.8	8.1
30°-40°	3717.8	13.5
40°-50°	5137.0	18.7
50°-60°	6412.5	23.4
60°-70°	5770.6	21.0
70°-80°	2419.0	8.8
80°-90°	422.6	1.5
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	27442.0	100.0
0°-180°	27442.0	100.0



REPORT NUMBER: P192222

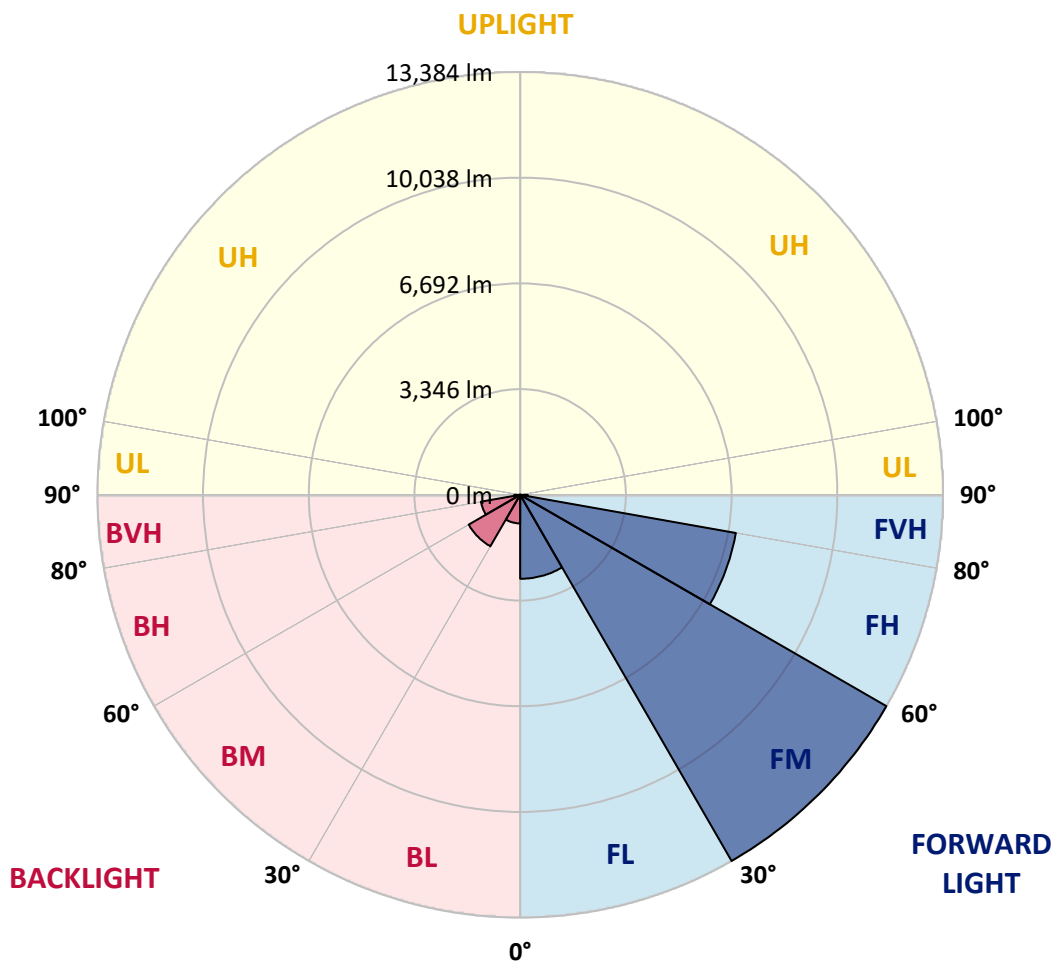
CATALOG NUMBER: GLEON-AF-04-LED-E1-T2R-7050-1200

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2657.7	9.7			
FM (30°-60°)	13384.1	48.8			
FH (60°-80°)	6931.8	25.3			G3/7500
FVH (80°-90°)	237.5	0.9			G3/500
BL (0°-30°)	904.8	3.3	B2/1000		
BM (30°-60°)	1883.2	6.9	B2/2500		
BH (60°-80°)	1257.8	4.6	B3/2500		G3/2500
BVH (80°-90°)	185.1	0.7			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G3**

Type II Short





REPORT NUMBER: P192222

CATALOG NUMBER: GLEON-AF-04-LED-E1-T2R-7050-1200

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	56°	57°	58°	59°
0°	2230.2	2230.2	2230.2	2230.2	2230.2	2230.2	2230.2	2230.2	2230.2	2230.2	2230.2
2.5°	2831.6	2800.4	2808.2	2756.2	2692.6	2609.5	2517.2	2515.9	2517.2	2508.1	2474.4
5°	3926.5	3888.9	3874.6	3757.7	3586.2	3342.0	3077.1	3048.5	3036.8	3006.9	2938.1
7.5°	4725.3	4704.6	4682.5	4594.2	4438.3	4165.5	3809.6	3748.6	3690.1	3675.8	3597.9
10°	5241.0	5235.8	5189.0	5165.7	5068.3	4831.9	4485.1	4426.6	4363.0	4340.9	4259.0
12.5°	5648.9	5647.6	5625.5	5632.0	5547.5	5376.1	5077.3	5024.1	4977.3	4909.8	4851.3
15°	5930.7	5932.0	5964.5	6000.9	5987.9	5872.3	5591.7	5568.3	5528.1	5481.3	5412.5
17.5°	6161.9	6168.4	6202.2	6268.4	6339.9	6330.8	6108.7	6089.2	6054.1	5990.5	5954.1
20°	6684.1	6708.7	6643.8	6643.8	6651.6	6686.7	6580.2	6564.6	6515.2	6481.4	6452.9
22.5°	7566.0	7594.6	7447.8	7298.4	7151.7	7045.2	6938.6	6958.1	6924.4	6901.0	6884.1
25°	8711.6	8733.7	8496.0	8244.0	7945.3	7555.6	7291.9	7280.3	7262.1	7247.8	7240.0
27.5°	9789.7	9798.8	9574.1	9205.2	8858.4	8298.6	7650.4	7636.2	7614.1	7586.8	7563.4
30°	10711.9	10709.3	10478.1	10126.1	9754.6	9135.1	8194.7	8150.5	8085.6	8011.5	7954.4
32.5°	11510.7	11506.8	11253.5	10888.6	10498.9	9963.8	8940.2	8849.3	8748.0	8603.8	8516.8
35°	12139.4	12136.8	11897.8	11517.2	11070.4	10744.4	9794.9	9683.2	9554.6	9361.1	9227.3
37.5°	12377.1	12377.1	12243.3	11983.5	11588.7	11365.3	10744.4	10609.3	10471.6	10252.1	10101.4
40°	12238.1	12240.7	12269.3	12221.2	12029.0	11857.5	11630.2	11549.7	11431.5	11234.1	11076.9
42.5°	11771.8	11786.1	11975.7	12208.2	12304.3	12277.1	12416.1	12379.7	12296.6	12144.6	12019.9
45°	11180.8	11225.0	11432.8	11871.8	12381.0	12639.5	13074.6	13078.5	13062.9	12981.1	12885.0
47.5°	10369.0	10431.4	10705.4	11299.0	12201.7	12991.5	13743.5	13778.6	13811.1	13757.8	13713.6
50°	9290.9	9365.0	9775.4	10562.5	11836.7	13356.4	15007.3	15165.8	15313.9	15295.7	15325.6
52.5°	8136.2	8223.2	8725.9	9602.7	11209.4	13440.9	15815.2	16073.7	16332.2	16543.9	16768.6
55°	7094.5	7047.8	7550.4	8473.9	10178.1	13060.3	16541.3	16853.0	17141.4	17401.2	17668.7
57.5°	5682.6	5759.3	6263.2	7176.3	8812.9	11986.1	17041.4	17497.3	17911.6	18341.6	18720.8
60°	4153.8	4230.5	4777.3	5704.7	7330.9	10357.3	16659.5	17350.5	18014.3	18672.8	19187.1
62.5°	2508.1	2565.3	3047.2	3930.4	5652.8	8425.9	14958.0	15864.6	16841.4	17628.5	18416.9
65°	1561.3	1593.7	1771.7	2257.5	3630.4	6290.5	12221.2	13209.7	14261.8	15260.6	16080.2
67.5°	1278.1	1289.8	1322.3	1426.2	1993.8	4101.9	9096.1	9971.5	10921.0	11887.4	12799.2
70°	1149.5	1141.7	1141.7	1148.2	1278.1	2205.5	5955.4	6525.6	7316.6	8157.0	8990.9
72.5°	1037.8	1030.0	1015.7	996.2	1043.0	1345.6	3078.4	3508.3	4078.5	4825.4	5624.2
75°	932.6	922.2	905.3	880.6	913.1	1015.7	1478.1	1658.7	1936.6	2334.1	2779.6
77.5°	823.5	810.5	794.9	776.7	818.3	789.7	866.4	931.3	1037.8	1165.1	1332.7
80°	700.1	688.4	683.2	674.1	723.5	601.4	611.8	652.0	714.4	783.2	861.2
82.5°	548.1	548.1	568.9	572.8	627.4	432.5	457.2	492.3	524.7	561.1	597.5
85°	361.1	363.7	433.8	461.1	494.9	291.0	342.9	354.6	380.6	401.4	416.9
87.5°	113.0	122.1	265.0	293.5	284.5	165.0	210.4	215.6	233.8	248.1	261.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P192222

CATALOG NUMBER: GLEON-AF-04-LED-E1-T2R-7050-1200

**CANDELA DISTRIBUTION (continued):**

	60°	61°	62°	63°	64°	65°	66°	67°	68°	69°	70°
0°	2230.2	2230.2	2230.2	2230.2	2230.2	2230.2	2230.2	2230.2	2230.2	2230.2	2230.2
2.5°	2474.4	2458.8	2444.5	2443.2	2432.8	2418.5	2423.7	2401.6	2402.9	2391.2	2378.3
5°	2909.5	2899.1	2847.2	2832.9	2793.9	2769.2	2765.3	2713.4	2706.9	2677.0	2644.5
7.5°	3535.6	3501.8	3429.1	3394.0	3327.7	3278.4	3255.0	3186.2	3152.4	3074.5	3039.4
10°	4191.5	4148.6	4059.0	4009.7	3946.0	3866.8	3823.9	3723.9	3684.9	3613.5	3527.8
12.5°	4799.4	4756.5	4664.3	4626.6	4542.2	4457.8	4411.0	4298.0	4247.4	4133.1	4065.5
15°	5361.8	5318.9	5238.4	5199.4	5115.0	5046.2	4983.8	4872.1	4812.4	4705.9	4617.5
17.5°	5907.3	5861.9	5791.7	5756.7	5674.8	5604.7	5537.2	5431.9	5370.9	5264.4	5185.2
20°	6413.9	6380.1	6329.5	6282.7	6200.9	6137.2	6056.7	5965.8	5877.5	5799.5	5724.2
22.5°	6855.5	6842.5	6788.0	6767.2	6697.1	6642.5	6572.4	6482.7	6419.1	6320.4	6250.2
25°	7236.1	7232.2	7206.2	7199.7	7150.4	7098.4	7082.8	7008.8	6950.3	6863.3	6790.6
27.5°	7563.4	7567.3	7560.8	7579.0	7566.0	7542.6	7543.9	7519.3	7485.5	7412.7	7349.1
30°	7927.1	7906.3	7918.0	7944.0	7951.8	7954.4	7997.2	8011.5	8008.9	7960.9	7929.7
32.5°	8441.5	8392.1	8346.6	8342.7	8368.7	8379.1	8451.9	8489.5	8522.0	8533.7	8538.9
35°	9097.4	8998.7	8903.9	8853.2	8809.0	8820.7	8872.7	8933.7	9005.2	9054.5	9113.0
37.5°	9923.5	9802.7	9635.1	9515.6	9485.8	9420.8	9454.6	9502.7	9572.8	9649.4	9750.7
40°	10924.9	10741.8	10553.4	10395.0	10309.3	10189.8	10188.5	10179.4	10222.2	10293.7	10436.5
42.5°	11888.7	11726.3	11526.3	11360.1	11248.4	11088.6	11056.1	10971.7	10991.2	11053.5	11192.5
45°	12791.4	12657.6	12535.5	12343.3	12248.5	12075.7	12021.2	11921.2	11865.3	11893.9	12032.9
47.5°	13665.6	13579.9	13452.6	13327.9	13255.1	13100.6	13030.4	12959.0	12887.5	12885.0	13030.4
50°	15369.7	15324.3	15173.6	15043.7	15078.8	14889.1	14900.8	14708.6	14795.6	14806.0	15111.2
52.5°	16971.2	17129.7	17241.4	17377.8	17466.1	17483.0	17541.5	17628.5	17733.7	17941.5	18224.7
55°	17888.3	18087.0	18202.6	18306.5	18478.0	18514.3	18611.7	18727.3	18819.6	19053.4	19293.7
57.5°	18978.0	19346.9	19526.2	19691.1	19922.3	20010.6	20173.0	20299.0	20418.5	20695.2	20986.1
60°	19649.5	20099.0	20464.0	20725.0	21014.7	21222.5	21468.0	21665.4	21946.0	22277.2	22711.0
62.5°	19115.7	19775.5	20260.0	20708.1	21101.7	21499.2	21851.2	22220.0	22646.1	23147.4	23820.3
65°	16989.4	17661.0	18490.9	18955.9	19476.8	20089.9	20625.0	21222.5	21803.1	22533.1	23528.0
67.5°	13677.3	14457.9	15390.5	15859.4	16458.2	17142.7	17742.8	18472.8	19150.8	20035.3	21265.4
70°	9858.5	10867.8	11652.3	12142.0	12840.8	13546.1	14125.4	14974.9	15536.0	16442.6	17714.2
72.5°	6242.4	7038.7	7999.8	8616.8	9237.7	9952.1	10544.4	11276.9	11800.4	12626.5	13778.6
75°	3356.3	3943.4	4787.7	5373.5	6038.5	6649.0	7342.6	7833.6	8220.7	8874.0	9809.2
77.5°	1573.0	1930.1	2357.5	2808.2	3258.9	3729.1	4186.3	4583.8	4750.0	5124.1	5676.1
80°	954.7	1070.3	1195.0	1334.0	1522.3	1674.3	1875.6	2021.1	2031.5	2149.7	2318.5
82.5°	637.8	680.6	718.3	753.4	801.4	839.1	881.9	932.6	953.4	980.7	1035.2
85°	435.1	455.9	463.7	485.8	480.6	493.6	510.5	527.3	536.4	535.1	559.8
87.5°	267.6	278.0	283.2	288.4	284.5	279.3	287.1	296.1	298.7	291.0	293.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0





REPORT NUMBER: P192222

CATALOG NUMBER: GLEON-AF-04-LED-E1-T2R-7050-1200

**CANDELA DISTRIBUTION (continued):**

	71°	72°	73°	74°	75°	85°	90°	95°	105°	115°	125°
0°	2230.2	2230.2	2230.2	2230.2	2230.2	2230.2	2230.2	2230.2	2230.2	2230.2	2230.2
2.5°	2380.9	2369.2	2357.5	2349.7	2347.1	2278.2	2248.4	2228.9	2187.3	2153.6	2126.3
5°	2626.3	2601.7	2582.2	2558.8	2545.8	2371.8	2308.1	2264.0	2191.2	2148.4	2109.4
7.5°	3021.2	2952.4	2912.1	2866.6	2827.7	2513.3	2408.1	2339.3	2238.0	2180.8	2136.7
10°	3469.3	3397.9	3334.2	3264.1	3203.1	2701.7	2548.4	2441.9	2308.1	2234.1	2175.6
12.5°	3969.4	3899.3	3818.7	3729.1	3651.2	2940.7	2727.7	2575.7	2392.5	2293.8	2212.0
15°	4560.4	4437.0	4339.6	4235.7	4144.7	3226.4	2936.8	2726.4	2482.2	2348.4	2239.3
17.5°	5109.8	4979.9	4847.4	4756.5	4651.3	3547.3	3147.2	2879.6	2556.2	2383.5	2244.5
20°	5646.3	5504.7	5390.4	5268.3	5157.9	3879.8	3371.9	3014.7	2604.3	2384.8	2212.0
22.5°	6119.1	6030.7	5903.4	5771.0	5659.2	4212.3	3582.3	3129.0	2622.5	2354.9	2154.9
25°	6656.8	6563.3	6407.4	6295.7	6171.0	4551.3	3788.9	3217.3	2612.1	2299.0	2066.5
27.5°	7230.9	7127.0	6967.2	6850.3	6699.7	4903.3	3978.5	3281.0	2573.1	2208.1	1948.3
30°	7829.7	7734.9	7577.7	7459.5	7307.5	5276.1	4190.2	3323.8	2495.2	2082.1	1810.6
32.5°	8472.6	8393.4	8237.5	8114.1	7951.8	5680.0	4387.6	3336.8	2377.0	1932.7	1665.2
35°	9083.1	9028.6	8897.4	8781.8	8612.9	6061.9	4596.8	3330.3	2236.7	1769.1	1532.7
37.5°	9770.2	9737.7	9672.8	9526.0	9319.5	6580.2	4847.4	3303.1	2065.2	1606.7	1431.4
40°	10502.8	10505.4	10435.3	10335.2	10143.0	7208.8	5146.2	3249.8	1878.2	1463.8	1339.2
42.5°	11278.2	11318.5	11284.7	11213.3	11028.8	7842.7	5503.4	3184.9	1696.3	1324.9	1248.2
45°	12166.7	12216.0	12268.0	12162.8	11983.5	8679.2	5973.6	3100.4	1500.2	1209.3	1185.9
47.5°	13191.5	13269.4	13316.2	13317.5	13138.2	9715.7	6737.3	3049.8	1326.2	1131.3	1156.0
50°	15354.1	15378.8	15489.2	15681.5	15543.8	12114.7	8071.3	3018.6	1208.0	1083.3	1133.9
52.5°	18470.2	18741.6	18932.6	18919.6	18732.5	13638.3	8806.4	2857.5	1137.8	1065.1	1123.5
55°	19739.2	20078.2	20431.5	20525.0	20379.5	14938.5	9501.4	2696.5	1104.1	1078.1	1127.4
57.5°	21430.3	22001.8	22486.3	22690.2	22479.8	16602.4	10415.8	2612.1	1093.7	1113.1	1152.1
60°	23405.9	24112.5	24749.0	25115.3	25115.3	18514.3	11364.0	2577.0	1079.4	1165.1	1193.7
62.5°	24674.9	25712.7	26673.9	27210.4	27194.8	19845.7	11784.8	2457.5	1046.9	1201.5	1250.8
65°	24680.1	25914.1	27138.9	27741.6	27772.8	19682.0	11089.9	2170.4	987.2	1206.7	1308.0
67.5°	22622.7	23938.5	25365.9	26040.1	26195.9	18118.2	9600.1	1784.7	889.7	1154.7	1328.8
70°	19106.6	20391.2	21848.6	22511.0	22787.7	15445.1	7732.3	1375.5	765.0	1040.4	1285.9
72.5°	15052.8	16312.7	17327.1	17811.6	18027.2	11805.6	5630.7	1039.1	627.4	876.7	1170.3
75°	10657.4	11602.9	12142.0	12249.8	12283.6	7116.6	3421.3	772.8	517.0	681.9	988.5
77.5°	6015.1	6420.4	6376.2	6424.3	6024.2	2747.1	1489.8	553.3	426.0	518.3	766.3
80°	2348.4	2421.1	2274.3	2228.9	2044.4	1022.2	657.2	385.8	340.3	392.3	536.4
82.5°	1035.2	1069.0	1037.8	1045.6	1000.1	527.3	393.6	279.3	259.8	287.1	355.9
85°	570.2	580.6	578.0	594.9	570.2	210.4	187.0	171.5	181.8	194.8	228.6
87.5°	278.0	280.6	271.5	285.8	276.7	106.5	92.2	97.4	106.5	109.1	109.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P192222

CATALOG NUMBER: GLEON-AF-04-LED-E1-T2R-7050-1200

**CANDELA DISTRIBUTION (continued):**

	135°	145°	155°	165°	175°	180°
0°	2230.2	2230.2	2230.2	2230.2	2230.2	2230.2
2.5°	2106.8	2096.4	2097.7	2095.1	2089.9	2089.9
5°	2088.6	2078.2	2078.2	2075.6	2069.1	2070.4
7.5°	2106.8	2089.9	2083.4	2074.3	2065.2	2065.2
10°	2127.6	2097.7	2079.5	2063.9	2052.2	2052.2
12.5°	2143.2	2096.4	2066.5	2045.7	2034.1	2034.1
15°	2148.4	2087.3	2045.7	2021.1	2010.7	2009.4
17.5°	2131.5	2052.2	2001.6	1973.0	1960.0	1956.1
20°	2079.5	1988.6	1927.5	1895.1	1876.9	1870.4
22.5°	2001.6	1897.7	1826.2	1792.5	1769.1	1765.2
25°	1892.5	1780.8	1710.6	1678.2	1665.2	1661.3
27.5°	1765.2	1661.3	1601.5	1580.7	1569.1	1567.8
30°	1644.4	1556.1	1511.9	1496.3	1482.0	1479.4
32.5°	1531.4	1475.5	1458.6	1436.6	1402.8	1398.9
35°	1450.9	1445.7	1434.0	1384.6	1343.0	1331.4
37.5°	1401.5	1449.6	1389.8	1292.4	1262.5	1259.9
40°	1372.9	1409.3	1306.7	1272.9	1275.5	1272.9
42.5°	1308.0	1345.6	1309.3	1293.7	1304.1	1306.7
45°	1243.0	1284.6	1328.8	1318.4	1343.0	1343.0
47.5°	1206.7	1269.0	1327.5	1327.5	1363.8	1376.8
50°	1165.1	1256.0	1306.7	1324.9	1353.4	1343.0
52.5°	1162.5	1233.9	1276.8	1309.3	1322.3	1310.6
55°	1166.4	1215.8	1246.9	1283.3	1298.9	1300.2
57.5°	1171.6	1205.4	1226.1	1243.0	1289.8	1289.8
60°	1184.6	1196.3	1208.0	1217.1	1278.1	1279.4
62.5°	1205.4	1187.2	1184.6	1193.7	1271.6	1266.4
65°	1237.8	1174.2	1154.7	1163.8	1265.1	1249.5
67.5°	1282.0	1154.7	1117.0	1123.5	1259.9	1226.1
70°	1322.3	1123.5	1070.3	1063.8	1210.6	1150.8
72.5°	1326.2	1087.2	1005.3	985.9	1052.1	994.9
75°	1261.2	1062.5	933.9	876.7	869.0	861.2
77.5°	1136.5	1048.2	850.8	761.1	745.6	750.8
80°	950.8	994.9	750.8	644.2	728.7	719.6
82.5°	710.5	878.0	637.8	570.2	568.9	502.7
85°	394.9	684.5	519.6	427.3	297.4	288.4
87.5°	110.4	380.6	363.7	241.6	165.0	171.5
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)